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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,717	10/12/2001	Venky Harinarayan	31052.P002	2465

500 7590 09/22/2006

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EXAMINER

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ART UNIT PAPER NUMBER

2626

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/976,717	HARINARAYAN ET AL.	
	Examiner	Art Unit	
	Brian L. Albertalli	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39, 41-73 and 78-90 is/are rejected.
- 7) ☒ Claim(s) 40 and 74-77 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendments to the claims have been entered. Claims 1, 12-14, 19, and 32 are currently amended and new claims 62-90 have been added.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 12, 19, and 32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12, 68, 69, 71, and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Chisholm (U.S. Patent 5,400,248).

In regard to claim 12, Chisholm discloses a method for a computing system to use human assistance in performing tasks (determining a vote proposal), the method comprising:

receiving an indication of a first subtask to be performed (an indication of a vote on a particular proposal is received from the vote administrator, column 5, lines 21-23),

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the first subtask having one or more associated criteria related to performance (the administrator specifies terms of the voting, column 5, lines 27-31 and column 15, line 6);

 sending an indication of the first subtask to multiple humans to each perform the first subtask (members of the voting group are notified, column 5, lines 31-34), each of the humans being identified as being capable of satisfying at least some of the associated criteria for the first subtask (the members of the voting group must meet the criteria of being selected to vote by the administrator, column 5, lines 27-31 and column 15, line 6);

 from each of the at least some of the multiple humans, receiving a result of performance of the first subtask by the human (the votes are received, column 5, lines 42-45); and

 automatically facilitating generation of a final result for the first subtask by,
 determining that the received results include a common result that was received from each of a selected number of humans (concurring votes), the selected number of humans being greater than 1 and based on at least one of a majority of the at least some humans (greater than 50%, column 15, lines 7-9), and of at least a specified number of two or more humans (two-thirds of the voters, column 15, lines 7-9); and

 selecting the common received result as the final result for the subtask (whatever acceptance criteria is indicated is used to determine acceptance of the proposition, column 15, lines 7-8).

In regard to claim 68, Chisholm discloses the facilitating of the generation of the final result for the first subtask includes receiving an indication to use a majority governs policy and automatically determining the selected number of humans to be a number of humans corresponding to the majority of the at least some humans (greater than 50%, column 15, lines 7-8; the system must inherently know how many people constitute 50% to determine if the number of votes was above 50%).

In regard to claim 69, Chisholm discloses the facilitating of the generation of the final result for the first subtask includes receiving an indication to use the specified number N for the selected number of humans, and automatically determining the selected number of humans to be N (two-thirds of the voters, column 15, lines 7-9; the system must inherently know the number of voters to determine if two-thirds selected the same vote.

In regard to claim 71, Chisholm discloses the common result received from the selected number of humans includes multiple results that are in agreement (different votes result in concurring final votes Y, Y, Y, Y, column 13, lines 41-50).

In regard to claim 72, Chisholm discloses the common result received from the selected number of humans includes multiple copies of a single result (unconditional votes of yes, column 5, lines 42-45).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 7-11, 15-21, 23-28, 30-34, 36, 37, 39, 41, 45, 46, 50-53, 55-61, 80, 81, 84, and 86-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo (U.S. Patent 5,974,392), in view of Walker et al. (U.S. Patent 5,862,223).

In regard to claim 1, Endo discloses a method for a computer system to use human assistance in performing tasks, the method comprising:

automatically and under control of a first computer system (Fig. 1, work flow server unit 18), causing a task to be performed by (column 4, lines 18-22),

identifying a first and second subtask of the task (Fig. 2, task dividing means 5 divides a work effort, i.e. task, into a plurality of tasks, i.e. subtasks, column 4, lines 39-39-41);

retrieving information about past quality of results of one or more humans when performing subtasks other than the first subtask (task execution person extracting section 61 extracts information about the accuracy of a task execution person, column 5, lines 20-30 and column 6, lines 5-11);

using the retrieved past quality information to facilitate performance of the first subtask by one or more humans (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task

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execution person, column 6, lines 5-11), the facilitating of the performance of the subtask including,

identifying one or more required capabilities for the performance of the subtask (task execution person extracting section 61 determines who can perform a certain task based on the based on the personal data 4 of a person, column 4, lines 41-44);

dispatching the first subtask to a remote computer system of a first human for performance by the first human (tasks are sent over transmission path 19 to the task execution person client units 20, column 4, lines 12-17), the first human identified as being one of one or more humans who have capabilities that satisfy the requirements for the subtask, the retrieved past quality information including past quality information for the first human when previously performing multiple subtasks other than the first subtask, the past quality information for the first human being at least part of the capabilities of the first human that satisfy the required capabilities for the first subtask (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11);

receiving the first result from the first human via the second computer system, the first result generated by performance of the first subtask by the first human (Fig. 7, step P3, the completed execution of the task is received, column 6, line 62 to column 7, line 6); and

generating a result for the task based at least in part on the first result (when a final task is completed the results are generated, column 7, lines 19-27).

Endo does not disclose providing payment to the first human for performance of the first subtask.

Walker et al. disclose providing the payment to the first human for performance of the first subtask (after completing a task, the agreed upon payment is provided to the task executors, column 30, lines 35-37 and column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to provide payment to the first human for performance of the subtask, because this would assure the human would be rapidly monetarily compensated for services rendered.

In regard to claim 2, Endo discloses the identifying by the first computer system of the first and second subtasks of the task includes decomposing the task into at least the first and second subtasks (task dividing means 5 divides a work effort into a plurality of tasks, column 4, lines 39-41).

In regard to claim 3, Endo discloses the method further comprises the first computer system dispatching said second subtask to a third computer system of a second human for performance by the second human (see Fig. 3, a first task T1 is sent to task execution person B, while a second task T3 is sent to a second task execution

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person F), and the first computer system receiving a second result from the second human via the third computer system for the second subtask (Fig. 4, tasks are completed by different task execution people, A, B, C, etc.); and

the first computer system further bases its generation of the result for said task on said second result (once the final task is complete, the task flow results are generated, column 7, lines 19-27).

In regard to claim 6, Endo discloses said first human is one of college educated, at most high school educated, at most elementary school educated, and not formally educated (every human is *one of* these education levels; that is, these four education levels represent every level of education a human could possibly have, therefore, any human will be *one of* college educated, at most high school educated, at most elementary school educated, and not formally educated).

In regard to claim 7, Endo discloses said subtask is one of text, speech, sound, and images related operations (results comprises drawings and documents, therefore the subtask is at least “image related”, column 1, lines 49-54).

In regard to claim 8, Endo does not disclose the result is one of text, numbers, tuples, and sound.

Walker et al. disclose performing subtasks wherein the results are one of text, numbers, tuples, and sound (grades, etc., column 11, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to include results that were one of text, numbers, tuples, and sound, so that a result pertinent to the task performing could be provided by the first human.

In regard to claim 9, Endo does not disclose the task is one of text classification, image comparison, image processing, speech comparison, speech recognition, conversion of speech into text, and comparison of music samples.

Walker et al. disclose performing subtasks wherein the task comprises text classification (classifying a text by grade, column 11, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to include tasks such as text classification, because this would increase the applicability of the system of Endo to additional task domains.

In regard to claim 10, Endo discloses said task is associated with multiple attributes related to performance of said task, the attributes including an accuracy attribute (accuracy required of task execution person, column 6, lines 5-11), a security attribute (secret, column 11, lines 15-25), a timeout attribute and a maximum time spent attribute (processing period of the task, column 6, lines 15-20), and wherein the identifying of the one or more humans, the dispatching of the first subtask, and the generating of the result for said task are performed in a manner to reflect the multiple

associated attributes (task execution persons are selected based on the attributes, column 6, lines 5-11).

Endo does not disclose a maximum cost per task attribute, and a maximum total cost attribute.

Walker et al. disclose a task is associated with a maximum cost per task attribute (e.g. \$50 for each solution, column 11, lines 40-44) and maximum total cost attribute (e.g. \$500 for a complete solution, column 11, lines 40-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to include a maximum cost per task attribute, and a maximum total cost attribute, because this would ensure that a task were completed without exceeding an allotted budget and would prevent overpayment of the humans.

In regard to claim 11, Endo discloses said task is associated with one or more attributes, and said attribute includes an accuracy attribute (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11).

In regard to claim 15, Endo discloses said task is associated with one or more attributes including a security attribute, and said security attribute comprises a selection of one of a strict security level, a lax security level, and no security level (secret, column 11, lines 15-25).

In regard to claim 16, Endo discloses said task is associated with one or more attributes that include a "maximum time" attribute specifying a maximum amount of time to be spent by an assigned human to perform said first subtask (processing period of the task, column 6, lines 15-20).

In regard to claims 17 and 18, Endo do not disclose a maximum cost per task attribute, and a maximum total cost attribute.

Walker et al. disclose a task is associated with a maximum cost per task attribute (e.g. \$50 for each solution, column 11, lines 40-44) and maximum total cost attribute (e.g. \$500 for a complete solution, column 11, lines 40-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to include a maximum cost per task attribute, and a maximum total cost attribute, because this would ensure that a task were completed without exceeding an allotted budget and would prevent overpayment of the humans.

In regard to claim 19, Endo discloses a storage medium having stored therein a plurality of programming instructions that are executable to cause a first computing system to perform a method comprising:

receiving a first and second subtask of a task (plurality of tasks divided from a work effort, column 4, lines 39-41), the first subtask for performance by one or more humans and having one or more associated criteria related to performance, the one or more associated criteria including an indication of the level of past accuracy of a human

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previously performing subtasks (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11);

retrieving information about past accuracy of a first human in previously performing subtasks (task execution person extracting section 61 extracts information about the accuracy of a task execution person, column 5, lines 20-30 and column 6, lines 5-11);

sending indication of the first subtask to a second computing system for performance by the first human (tasks are sent over transmission path 19 to the task execution person client units 20, column 4, lines 12-17), the first human identified as being capable of satisfying at least some of the associated criteria for the first subtask, the past accuracy of the first human satisfying the indicated level of past accuracy for the subtask (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11);

receiving a first result from the first human based on performance of the subtask using the second computing system (Fig. 7, step P3, the completed execution of the task is received, column 6, line 62 to column 7, line 6); and

generating a result for the task based at least in part on the first result (when a final task is completed the results are generated, column 7, lines 19-27).

Endo does not disclose having compensation associated with the first subtask and facilitating providing of the associated compensation to the first human for performance of the subtask.

Walker et al. disclose having compensation associated with the performance of a subtask (e.g. \$50 for each solution, column 11, lines 40-44) and facilitating providing of the associated compensation to the first human for performance of the subtask (after completing a task, the agreed upon payment is provided to the task executors, column 30, lines 35-37 and column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to provide payment to the first human for performance of the subtask, because this would assure the human would be rapidly monetarily compensated for services rendered.

In regard to claim 20, Endo discloses said instructions, when executed, operate to decompose a task to be performed into at least a first and second subtask (task dividing means 5 divides a work effort into a plurality of tasks, column 4, lines 39-41).

In regard to claim 21, Endo discloses dispatching an indication of said second subtask to a computing system for performance by a second human (see Fig. 3, a first task T1 is sent to task execution person B, while a second task T3 is sent to a second task execution person F), receive a second result from the second human for said second subtask (Fig. 4, tasks are completed by different task execution people, A, B, C, etc.), and generate the result for said task further based on said second result (once the final task is complete, the task flow results are generated, column 7, lines 19-27).

In regard to claim 23, Endo discloses said instructions, when executed, further operate to perform said second subtask producing a second result, and generating the result for said task further based on said second result (see Fig. 3, a first task T1 is sent to task execution person B, while a second task T3 is sent to a second task execution person F; Fig. 4, tasks are completed by different task execution people, A, B, C, etc.; once the final task is complete, the task flow results are generated, column 7, lines 19-27).

In regard to claim 24, Endo discloses said first human is one of college educated, at most high school educated, at most elementary school educated, and not formally educated (every human is *one of* these education levels; that is, these four education levels represent every level of education a human could possibly have, therefore, any human will be *one of* college educated, at most high school educated, at most elementary school educated, and not formally educated).

In regard to claim 25, Endo discloses said subtask is one of text and speech (text is included in the tasks, column 11, lines 26-34).

In regard to claim 26, Endo does not disclose the result is one of text, numbers, tuples, and sound.

Walker et al. disclose performing subtasks wherein the results are one of text, numbers, tuples, and sound (grades, etc., column 11, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to include results that were one of text, numbers, tuples, and sound, so that a result pertinent to the task performing could be provided by the first human.

In regard to claim 27, Endo does not disclose the task is one of text classification, image comparison, image processing, speech comparison, speech recognition, conversion of speech into text, and comparison of music samples.

Walker et al. disclose performing subtasks wherein the task comprises text classification (classifying a text by grade, column 11, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to include tasks such as text classification, because this would increase the applicability of the system of Endo to additional task domains.

In regard to claim 28, Endo discloses said task is associated with attributes that include an accuracy attribute (accuracy required of task execution person, column 6, lines 5-11), a security attribute (secret, column 11, lines 15-25), and a timeout attribute (processing period of the task, column 6, lines 15-20).

In regard to claim 30, Endo discloses said task is associated with one or more attributes including a security attribute, and said security attribute comprises a selection

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of one of a strict security level, a lax security level, and no security level (secret, column 11, lines 15-25).

In regard to claim 31, Endo discloses said task is associated with one or more attributes that include a "maximum time" attribute specifying a maximum amount of time to be spent by an assigned human to perform said first subtask (processing period of the task, column 6, lines 15-20).

Endo do not disclose a maximum cost per task attribute, and a maximum total cost attribute.

Walker et al. disclose a task is associated with a maximum cost per task attribute (e.g. \$50 for each solution, column 11, lines 40-44) and maximum total cost attribute (e.g. \$500 for a complete solution, column 11, lines 40-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to include a maximum cost per task attribute, and a maximum total cost attribute, because this would ensure that a task were completed without exceeding an allotted budget and would prevent overpayment of the humans.

In regard to claim 32, Endo discloses an apparatus comprising:

a storage medium having stored therein a plurality of programming instructions that are machine executable, said instruction operate to:

receive indications of a first and a second subtask of a task (plurality of tasks divided from a work effort, column 4, lines 39-41), the first subtask associated with one

or more capabilities to be used in performance of the first subtask (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11);

dispatch information about the first subtask to a remote computer system of a first human for performance by said first human of the first subtask (tasks are sent over transmission path 19 to the task execution person client units 20, column 4, lines 12-17), the first human identified as having one or more capabilities that satisfy the associated capabilities for the first subtask (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11);

receive a first result from the remote computer system based on performance of the first subtask by said first human (Fig. 7, step P3, the completed execution of the task is received, column 6, line 62 to column 7, line 6);

retrieve information about past accuracy of said first human in previously performing subtasks; and generate a result for said task based on at least in part on said first result and at least in part on the past accuracy information for said human (the results of each task calculates the evaluation point for the pertinent task, based on the accuracy of the task execution person, column 9, lines 22-30); and

a processor coupled to said storage medium to execute said instructions (column 4, lines 22-24).

Endo does not disclose the dispatching including providing an indication to the first human of a first level of compensation associated with the performance of the first

subtask and providing the payment to the first human for performance of the first subtask, the provided payment being based on the first compensation level.

Walker et al. disclose the dispatching including providing an indication to the first human of a first level of compensation associated with the performance of the first subtask (a task request is sent to the qualified persons, column 30, lines 6-8; a request includes a price that will be paid to the person upon completion of the task, column 21, lines 12-26); and

providing the payment to the first human for performance of the first subtask, the provided payment being based on the first compensation level (after completing the task, the agreed upon payment is provided to the person, column 30, lines 35-37 and column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to indicate to a first human a level of compensation for completing a subtask, then subsequently provide the first human payment corresponding with the compensation upon completion of the subtask, in order to provide a universally applicable payment protocol for the experts providing advice that allows a person to maximize their earning potential, as taught by Walker et al. (column 9, lines 19-27).

In regard to claim 33, Endo discloses the identifying by the first computer system of the first and second subtasks of the task includes decomposing the task into at least

the first and second subtasks (task dividing means 5 divides a work effort into a plurality of tasks, column 4, lines 39-41).

In regard to claim 34, Endo discloses instructions further operate to dispatch information about said second subtask to a distinct remote computer system of a second human for performance by the second human (see Fig. 3, a first task T1 is sent to task execution person B, while a second task T3 is sent to a second task execution person F), receive a second result from the second human via the distinct remote computer system for said second subtask (Fig. 4, tasks are completed by different task execution people, A, B, C, etc.), and generate the result for said task further based on said second result (once the final task is complete, the task flow results are generated, column 7, lines 19-27).

In regard to claim 36, Endo discloses said instructions, when executed, further operate to perform said second subtask producing a second result, and generating the result for said task further based on said second result (see Fig. 3, a first task T1 is sent to task execution person B, while a second task T3 is sent to a second task execution person F; Fig. 4, tasks are completed by different task execution people, A, B, C, etc.; once the final task is complete, the task flow results are generated, column 7, lines 19-27).

In regard to claim 37, Endo discloses said first human is one of college educated, at most high school educated, at most elementary school educated, and not formally educated (every human is *one of* these education levels; that is, these four education levels represent every level of education a human could possibly have, therefore, any human will be *one of* college educated, at most high school educated, at most elementary school educated, and not formally educated).

In regard to claim 39, Endo does not disclose said result is one of numbers and tuples.

Walker et al. disclose performing subtasks wherein the results are one of numbers and tuples (grades, column 11, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to include results that were one of numbers and tuples, so that a result pertinent to the task performing could be provided by the first human.

In regard to claim 41, Endo discloses said task is associated with attributes that include multiple of an accuracy attribute (accuracy required of task execution person, column 6, lines 5-11), a security attribute (secret, column 11, lines 15-25), a timeout attribute and a maximum time spent attribute (processing period of the task, column 6, lines 15-20).

In regard to claim 45, Endo discloses said task is associated with one or more attributes including a security attribute, and said security attribute comprises a selection of one of a strict security level, a lax security level, and no security level (secret, column 11, lines 15-25).

In regard to claim 46, Endo discloses the first computer system is a task server system that is part of a distributed hybrid computer/human computation arrangement, and wherein the first human is one of numerous human remote from the task server system who each use distinct client computing devices to act as nodes of the distributed hybrid computer/human computation system (server unit 18 and client units 20 connected over network 19, column 4, lines 12-24).

In regard to claim 50 Endo discloses disclose the dispatching by the first computer system of the first subtask to the remote second computer system is performed by programmatically sending one or more messages from the first computer system to the remote computer system (through transmitting receiving section 16, column 5, lines 11-13).

In regard to claim 51, Endo does not disclose the dispatching by the first computer system of the subtask to the remote second computer system of first human includes providing an indication to the first human of the payment to be provided for performance of the subtask if the first human chooses to perform the first subtask.

Walker et al. disclose the dispatching by the first computer system of the subtask to the remote second computer system of first human includes providing an indication to the first human of the payment to be provided for performance of the subtask if the first human chooses to perform the first subtask (a task request is sent to the qualified persons, column 30, lines 6-8; a request includes a price that will be paid to the person upon completion of the task, column 21, lines 12-26).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to indicate to a first human a level of compensation for completing a subtask, so the first human could determine if the payment were adequate for the services to be performed before performing said services.

In regard to claim 52 Endo does not disclose the providing of the payment to the first human is performed in response to the receiving from the first human of the first result from the performance of the subtask.

Walker et al. disclose the providing of the payment to the first human is performed in response to the receiving from the first human of the first result from the performance of the subtask (after completing the task, the agreed upon payment is provided to the person, column 30, lines 35-37 and column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to provide payment to the first human for performance of the subtask, because this would assure the human would be rapidly monetarily compensated for services rendered.

In regard to claim 53, Endo does not disclose the required capabilities of the human for performance of the first subtask include an ability to speak a specified language.

Walker et al. disclose requiring a human to possess capabilities for completing a task, wherein the capabilities include an ability to speak a specified language (such as English, column 11, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to require a human to speak a specific language to complete a task, so that tasks in different languages could be completed by humans that understood the language and to prevent the task from being sent to humans who did not understand the language.

In regard 55, Endo discloses the required capabilities of the human for performance of the first subtask include a specified degree of historical accuracy by the human when performing the subtasks (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11).

In regard to claim 56, Endo does not disclose the payment provided to the first human is further based on part on the quality of the performed subtask.

Walker et al. disclose payment is further based on quality of the performed subtask (column 39, lines 11-15).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to base payment to the first human based in part on the quality of the performed task, in order to ensure the quality of work provided by the first human.

In regard to claim 57, Endo does not disclose the payment provided to the first human is based in part on cumulative contributions of the first human.

Walker et al. disclose payment is based on cumulative contributions of the first human (the number of tasks completed, column 29, line 59 to column 30, line 8 and column 11, lines 40-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to provide payment based on cumulative contributions of the first human, so that the human would be compensated for each subtask performed.

In regard to claim 58, Endo does not disclose the payment provided to the first human is based on a prior agreement with the first human.

Walker et al. disclose payment provided to the first human is based on a prior agreement with the first human (the human accepting a subtask is an agreement that the price offered is sufficient, column 21, lines 12-29).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to provide payment based on a prior agreement so the human

performing the subtask would be able to decide whether the offered payment was sufficient for performing the subtask.

In regard to claim 59 Endo does not disclose the first compensation level is a first monetary amount and wherein an amount of the payment provided to the first human for the performance of the subtask is the first monetary amount.

Walker et al. disclose the first compensation level is a first monetary amount (the price, column 21, lines 12-26) and wherein an amount of the payment provided to the first human for the performance of the subtask is the first monetary amount (the human is paid the price after completing the subtask, column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to provide a monetary amount as the first compensation level and to provide that monetary amount to the first human after performance of the subtask, so the human performing the subtask would be able to decide whether the offered payment was sufficient for performing the subtask, and the correct payment would be provided to the first human.

In regard to claim 60, Endo does not disclose the second subtask has a distinct second monetary amount of compensation and providing payment of the secondary amount of compensation.

Walker discloses a second subtask has a second distinct second monetary amount of compensation (\$50 for each solution or \$500 for complete solution, column

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11, lines 40-44) and providing payment of the secondary amount of compensation (the human is paid the price after completing the subtask, column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to associate the second subtask with a distinct secondary monetary amount of compensation and to provide that monetary amount to a second human, so that the second human would be paid an appropriate amount according to the requirements of the subtask.

In regard to claim 61, Endo does not disclose providing the associated compensation to the first human for the performance of the first subtask based in part on the receiving of the first result (after completing a task, the agreed upon payment is provided to the task executors, column 30, lines 35-37 and column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to provide payment to the first human for performance of the subtask, because this would assure the human would be rapidly monetarily compensated for services rendered.

In regard to claim 80, Endo discloses the past quality information for the first human when previously performing subtasks other than the first subtask reflects a past accuracy of the first human in performing those other subtasks (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11).

In regard to claim 81, Endo discloses after receiving of the first result from the first human, determining the accuracy of the first result and updating the past accuracy information for the first human to reflect the determined accuracy (accuracy of a task execution person is modified, column 9, lines 31-38).

In regard to claim 84, Endo discloses the generating of the result for the task is based at least in part on the past quality information for the first human (the results of each task calculates the evaluation point for the pertinent task, based on the accuracy of the task execution person, column 9, lines 22-30).

In regard to claim 86, Endo does not disclose the dispatching of the first subtask to the remote second computer system of the first human includes providing an indication to the first human of compensation associated with performance of the first subtask.

Walker et al. discloses providing an indication to the first human of compensation associated with performance of the first subtask (a task request is sent to the qualified persons, column 30, lines 6-8; a request includes a price that will be paid to the person upon completion of the task, column 21, lines 12-26).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to indicate to a first human a level of compensation for

completing a subtask, so the first human could determine if the payment were adequate for the services to be performed before performing said services.

In regard to claim 87, Endo does not disclose the payment provided to the first human is further based in part on the quality of the first result.

Walker et al. disclose payment is further based on quality of the first result (column 39, lines 11-15).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to base payment to the first human based in part on the quality of the first result, in order to ensure the quality of work provided by the first human.

In regard to claims 88 and 89 the Examiner has interpreted the broad recitations of a human having "an average level of skill" and the human being "not an expert" as equivalents. Endo discloses the first human is neither an expert and does not disclose that the human has any extraordinary qualifications for any given tasks, therefore Endo discloses humans which "have an average level of skill with respect to performing the first subtask" and the human is "not an expert with respect to performing the subtask" (column 6, lines 5-11).

In regard to claim 90, Endo does not disclose the subtask involves an activity that is straightforward for a typical human but is difficult for a computer system.

Walker et al. disclose a subtask that is straightforward for a typical human but difficult for a computer system (grading exams, column 11, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to perform subtasks which were straightforward for a typical human but difficult for a computer system, because if the subtasks were not difficult for the computer system, it would be more efficient to simply have the computer system perform the subtasks.

6. Claims 3, 5, 22, 29, 35, 42-44, 82, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo, in view of Walker et al., and further in view of Nelson et al. (U.S. Patent 5,797,130).

In regard to claim 4, Endo and Walker et al. do not disclose said task further comprising a third subtask, and the method further comprises the first computer system receiving and performing said third subtask producing a third result; and

the first computer system further bases its generation of the result for said task on said third result.

Nelson et al. disclose a method for performing tasks, wherein a task comprises a third subtask (automated screening, Fig. 2, 12), and the method further comprises a first computer system receiving and performing said third subtask producing a third result (slides are scanned by a computer to remove samples that are clearly normal, column 3, lines 39-53); and

the first computer system further bases its generation of the result for said task on said third result (the overall task of classifying a set of slides is “based on” the third task of automatically screening the slides, as these are removed and not sent to a human screener, column 3, lines 52-55 and Fig. 2, step 22).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to send a third subtask of a task to the first computer system for performance by the computer system and basing the result on the results from the first computer system, because performing some subtasks automatically by a computer saves costs and human performance time, as taught by Nelson et al. (column 4, lines 35-37).

In regard to claim 5, Endo and Walker et al. do not disclose the method further comprises the first computer system performing said second subtask producing a second result; and

the first computer further bases its generation of the first result for the task on said second result.

Nelson et al. disclose a method for performing tasks, comprises a first computer system performing a second subtask producing a second result (slides are scanned by a computer to remove samples that are clearly normal, column 3, lines 39-53); and

the first computer further bases its generation of the first result for the task on said second result (the overall task of classifying a set of slides is “based on” the third

task of automatically screening the slides, as these are removed and not sent to a human screener, column 3, lines 52-55 and Fig. 2, step 22).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to perform the second subtask by the first computer and base the result on the result provided by the first computer, because performing some subtasks automatically by a computer saves costs and human performance time, as taught by Nelson et al. (column 4, lines 35-37).

In regard to claim 22, Endo discloses decomposing said task into at least said first, said second, and a third subtask (see Fig. 3, tasks T1, T2, T3, column 1, lines 18-20).

Endo and Walker et al. do not disclose "instructions" perform said third subtask producing a third result; and generate the result for said task based on said third result.

Nelson et al. disclose a method for performing tasks, comprising performing said third subtask producing a third result using "computer instructions" (slides are scanned by a computer to remove samples that are clearly normal, column 3, lines 39-53); and

generating a result for said task based on said third result (the overall task of classifying a set of slides is "based on" the third task of automatically screening the slides, as these are removed and not sent to a human screener, column 3, lines 52-55 and Fig. 2, step 22).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to perform a third task with "instructions" and

base the result on the third result, because performing some subtasks automatically by a computer saves costs and human performance time, as taught by Nelson et al. (column 4, lines 35-37).

In regard to claim 29, Endo discloses dispatching said first subtask to N1-1 additional humans to perform said first task (see Fig. 3, task T1 is dispatched to task execution person B and task execution person A).

Endo and Walker et al. do not said accuracy includes one of a majority govern, and at least N2 agreed results, wherein N2 and N1 are integers, with N1 greater than N2.

Nelson et al. disclose a method for performing subtasks, wherein a first subtask is dispatched to N1-1 additional humans to perform said first task (second human screener and third human screener, column 4, lines 17-23) and accuracy includes on of a majority govern, and at least N2 agreed results, wherein N2 and N1 are integers, with N1 greater than N2 (slides agreed as normal by all three humans and missed slides in step 21 are identified so as to determine a proficiency of the first human, column 4, lines 23-30).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to determine an accuracy based on one of a majority govern, and at least N2 agreed results, wherein N2 and N1 are integers, with N1 greater than N2, because this type of proficiency testing improves quality control, as taught by Nelson et al. (column 5, lines 23-26).

In regard to claim 35, Endo discloses decomposing said task into at least said first, said second, and a third subtask (see Fig. 3, tasks T1, T2, T3, column 1, lines 18-20).

Endo and Walker et al. do not disclose “instructions” perform said third subtask producing a third result; and generate the result for said task based on said third result.

Nelson et al. disclose a method for performing tasks, comprising performing said third subtask producing a third result using “computer instructions” (slides are scanned by a computer to remove samples that are clearly normal, column 3, lines 39-53); and

generating a result for said task based on said third result (the overall task of classifying a set of slides is “based on” the third task of automatically screening the slides, as these are removed and not sent to a human screener, column 3, lines 52-55 and Fig. 2, step 22).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to perform a third task with “instructions” and base the result on the third result, because performing some subtasks automatically by a computer saves costs and human performance time, as taught by Nelson et al. (column 4, lines 35-37).

In regard to claim 42, Endo discloses dispatching information about the first subtask to multiple additional humans to perform said first subtask (see Fig. 3, task T1 is dispatched to task execution person B and task execution person A).

Endo and Walker et al. do not disclose said accuracy is based at least in part on receiving results in agreement from multiple of the humans to whom the information about the first subtask is dispatched.

Nelson et al. disclose a method for performing subtasks wherein accuracy is based at least in part on receiving results in agreement from multiple of the humans to whom the information about the first subtask is dispatched (slides agreed as normal by all three humans and missed slides in step 21 are identified so as to determine a proficiency of the first human, column 4, lines 23-30).

It would have been obvious to one of ordinary skill in the art at the time of invention modify Endo and Walker et al. to base the accuracy at least in part on receiving results in agreement from multiple of the humans to whom the information about the first subtask were dispatched, because this type of proficiency testing improves quality control, as taught by Nelson et al. (column 5, lines 23-26).

In regard to claim 43, Endo discloses tracking the accuracy of the humans (accuracy of a task execution person is modified, column 9, lines 31-38).

In regard to claim 44, Endo discloses taking into consideration the accuracy of the humans when generating a result (the results of each task calculates the evaluation point for the pertinent task, based on the accuracy of the task execution person, column 9, lines 22-30).

In regard to claim 82, Endo and Walker et al. do not disclose the determining of the accuracy of the first result includes obtaining one or more results that are each generated by performance of the first subtask by a human other than the first human, and using the obtained one or more results as part of determining the accuracy of the first result.

Nelson et al. disclose a method for performing subtasks wherein the accuracy of the first result includes obtaining one or more results that are each generated by performance of the first subtask by a human other than the first human, and using the obtained one or more results as part of determining the accuracy of the first result (slides agreed as normal by all three humans and missed slides in step 21 are identified so as to determine a proficiency of the first human, the proficiency indicating an accuracy of the results of the human, column 4, lines 23-30).

It would have been obvious to one of ordinary skill in the art at the time of invention modify Endo and Walker et al. to base the accuracy at least in part on receiving results in agreement from multiple of the humans to whom the information about the first subtask were dispatched, because this type of proficiency testing improves quality control, as taught by Nelson et al. (column 5, lines 23-26).

In regard to claim 83, Endo discloses weighting each of the obtained one or more results based at least in part on retrieved past accuracy information for the human whose performance generated the result (the results of each task calculates the

evaluation point for the pertinent task, based on the accuracy of the task execution person, column 9, lines 22-30).

7. Claims 12-14, 62, 64-67, 70, 73, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo, in view of Nelson et al.

In regard to claim 12, Endo discloses a computing system to use human assistance in performing tasks, the method comprising:

receiving an indication of a first subtask to be performed, the first subtask having one or more associated criteria related to performance (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11);

sending an indication of the first subtask to multiple humans to each perform the first subtask (see Fig. 3, task T1 is dispatched to task execution person B and task execution person A), each of the humans being identified as being capable of satisfying at least some of the associated criteria for the first subtask (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11).

Endo does not disclose from each of at least some of the multiple humans, receiving a result of performance of the first subtask by the human; and automatically generating of a final result for the first subtask by,

determining the received results include common result that was received from each of a selected number of humans, the selected number of

humans being greater than 1 and based on at least one of a majority governs, of the at least some humans and of at least a specified number of two or more humans; and
selecting the common received result as the final result for the first subtask.

Nelson et al. disclose a method for completing subtasks, comprising:

from each of at least some of multiple humans, receiving a result of performance of the first subtask by the human (Fig. 2, a first screener, second screener and third screener all provide a screening result, column 3, lines 65-66 and column 4, lines 10-24); and

automatically generating of a final result for the first subtask by, determining the received results include common result that was received from each of a selected number of humans, the selected number of humans being greater than 1 and based on at least one of a majority governs, of the at least some humans and of at least a specified number of two or more humans (slides agreed as normal by all three humans identified so as to determine a proficiency of the first human, the proficiency indicating an accuracy of the results of the human, column 4, lines 23-30; and

selecting the common received result as the final result for the first subtask (those slides agreed as abnormal by all three humans are determined to be abnormal and identified in step 21, column 4, lines 20-23).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to receive results of multiple humans and determine a final result based on majority governs or agreement of at least a two humans, because this type of proficiency testing improves quality control, as taught by Nelson et al. (column 5, lines 23-26).

In regard to claim 13, Endo does not disclose tracking the accuracy of the at least some humans based at least in part on whether a result received from a human is the common result.

Nelson et al. disclose tracking the accuracy of the at least some humans based at least in part on whether a result received from a human is the common result (slides agreed as normal by all three humans and missed slides in step 21 are identified so as to determine a proficiency of the first human, the proficiency indicating an accuracy of the results of the human, column 4, lines 23-30).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to track the accuracy based on whether a result was a common result, because this type of proficiency testing improves quality control, as taught by Nelson et al. (column 5, lines 23-26).

In regard to claim 14, Endo discloses the first subtask is part of a task (task dividing means 5 divides a work effort, i.e. task, into a plurality of tasks, i.e. subtasks, column 4, lines 39-39-41), and wherein the method further comprises automatically

generating a result for the task based at least in part on the selected result for the first subtask and on the accuracy of at least some humans who provided the selected result (the results of each task calculates the evaluation point for the pertinent task, based on the accuracy of the task execution person, column 9, lines 22-30).

In regard to claim 62, Endo discloses the receiving of the indication of the first subtask includes automatically decomposing the task into at least the first and second subtasks (task dividing means 5 divides a work effort into a plurality of tasks, column 4, lines 39-41).

In regard to claim 64, Endo discloses the multiple humans to whom the indication of the first subtask is sent include a number $N1$ of the multiple humans, such that N and $N1$ are integers and $N1$ is greater than N (see Fig. 3, task $T1$ is dispatched to task execution person B and task execution person A).

In regard to claim 65, Endo do not disclose the multiple humans from whom the results of performance of the first subtask is sent include a number $N1$ of the multiple humans, such that N and $N1$ are integers and $N1$ is greater than N .

Nelson et al. disclose the multiple humans from whom the results of performance of the first subtask is sent include a number $N1$ of the multiple humans, such that N and $N1$ are integers and $N1$ is greater than N (Fig. 2, a first screener, second screener and

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third screener all provide a screening result, column 3, lines 65-66 and column 4, lines 10-24).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to receive results from N1 of the humans, because this type of proficiency testing improves quality control, as taught by Nelson et al. (column 5, lines 23-26).

In regard to claim 66, Endo discloses the facilitating of the generation of the final result for the first subtask includes generating the final result so as to have a desired accuracy by automatically determining the selected number of humans for that desired accuracy (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11).

In regard to claim 67, Endo discloses the receiving of the indication of the first subtask includes receiving an indication of a desired accuracy for the final result, and wherein the facilitating of the generation of the final result is performed such that the final result has the indicated desired accuracy (task flow compiling section 62 decides the assignment of a task execution person based on the accuracy of the task execution person, column 6, lines 5-11; the results of each task calculates the evaluation point for the pertinent task, based on the accuracy of the task execution person, column 9, lines 22-30).

In regard to claim 70, Endo does not disclose the facilitating of the generation of the final result for the first subtask includes, before the determining that the received results include the common result from each of the selected humans, determining that a first group of multiple results received from multiple of the humans for the first subtask do not include a common result that was received from a selected number of humans.

Nelson et al. disclose the facilitating of the generation of the final result for the first subtask includes, before the determining that the received results include the common result from each of the selected humans, determining that a first group of multiple results received from multiple of the humans for the first subtask do not include a common result that was received from a selected number of humans (slides indicated as normal by the first human screener are checked by the second human screener, column 3, line 65 to column 4, line 2; the second human screener then determines slide is actually not normal, i.e. not a common result, column 4, lines 17-22), and sending indications of the first subtask to additional humans in order to obtain the common result from each of the selected number of humans (a third human screener confirms an abnormal slide, thus obtaining a common result, column 4, lines 20-22).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to send non common results to additional humans to obtain the common result, because this type of proficiency testing improves quality control, as taught by Nelson et al. (column 5, lines 23-26).

In regard to claims 73 and 79, Endo does not disclose the first subtask involves image processing and image comparison.

Nelson et al. disclose the first subtask involves image processing and image comparison (medical image analysis, column 4, lines 60-65).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo for image processing and image comparison tasks, because this provides quality control by humans for the tasks of image comparison and image processing, thereby increasing accuracy.

8. Claims 38, 49, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo, in view of Walker et al., and further in view of Bejar et al. (U.S. Patent 6,295,439).

In regard to claim 38, Endo and Walker et al. do not disclose the dispatched information about said first subtask includes speech to be review by the first human.

Bejar et al. disclose a method for performing subtasks, comprising dispatching information about a first subtask that includes speech to be review by the first human (the constructed responses evaluated by the human evaluators comprise audio responses, column 11, lines 3-5).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to include subtasks wherein the indication of the subtask included speech to be review by the human, because this would allow

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humans who preferred speech output or humans who required speech output (e.g. blind humans) to perform subtasks.

In regard to claim 49, Endo and Walker et al. do not disclose the dispatching by the first computer system of the first subtask to the remote second computer system is performed using a defined API.

Bejar et al. disclose the dispatching by the first computer system of the first subtask to the remote second computer system is performed using a defined application programming interface ("API") (see appendix A).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to dispatch a subtask using a defined API, because API's because this allows different applications to function together without requiring a detailed understanding of the applications' internal workings.

In regard to claim 54, Endo and Walker et al. do not disclose the required capabilities of the human for human performance includes an ability to hear.

Bejar et al. disclose a method for performing subtasks, wherein a requirement for performing the subtask includes an ability to hear (constructed response may be audio, column 11, lines 3-5).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to require a human to have the capability to

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hear, because this would ensure that audio related subtasks would be performed by a human capable of performing the subtask.

9. Claims 63 and 78 rejected under 35 U.S.C. 103(a) as being unpatentable over Endo, in view of Nelson et al., and further in view of Walker et al.

In regard to claim 63, Endo and Nelson et al. do not disclose the first subtask further has associated compensation for performance of the first subtask, and wherein the method further comprises facilitating providing of the associated compensation to one or more of the humans who provided the common result.

Walker et al. disclose a method for performing subtasks, wherein disclose the first subtask further has associated compensation for performance of the first subtask (e.g. \$50 for each solution, column 11, lines 40-44), and wherein the method further comprises facilitating providing of the associated compensation to one or more of the humans who provided the common result (after completing a task, the agreed upon payment is provided to the task executors, column 30, lines 35-37 and column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo to provide payment to the first human for performance of the subtask, because this would assure the human would be rapidly monetarily compensated for services rendered.

In regard to claim 78, Endo and Nelson et al. do not disclose the first subtask includes text classification.

Walker et al. disclose a method for performing subtasks comprising text classification (grading, column 11, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Nelson et al. to include text classification as a subtask, because this would facilitate the classification of text to be performed by many humans.

10. Claims 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo, in view of Walker et al., and further in view of Christensen et al. (U.S. Patent 5,881,230).

In regard to claim 47, Endo and Walker et al. do not disclose that the coordination services are performed on a distinct coordination server remote from the task server system, wherein the task server system sends information indicating the first subtask and required capabilities to the remote coordination server.

Christensen et al. disclose a method for implementing application objects on remote computers as needs dictate so that a given logical model can be implemented independently of the underlying physical model (column 13, line 62 to column 14, line 27).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. so the services of the task server and the services of the coordinating server were implemented on separate physical servers with

the appropriate information sent between two, so that the physical performance and administration needs of the system could be addressed without giving up the logical model, as taught by Christensen et al. (column 13, lines 62-67).

In regard to claim 48, Endo and Walker et al. do not disclose that the coordination services are performed on a distinct coordination server remote from the task server system, wherein the task server system sends information indicating the first subtask and required capabilities to the remote coordination server.

Christensen et al. disclose a method for implementing application objects on remote computers as needs dictate so that a given logical model can be implemented independently of the underlying physical model (column 13, line 62 to column 14, line 27).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. so the services of the task server and the services of the coordinating server were implemented on separate physical servers with the appropriate information sent between two, so that the physical performance and administration needs of the system could be addressed without giving up the logical model, as taught by Christensen et al. (column 13, lines 62-67).

11. Claim 85 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo, in view of Walker et al., and further in view of Paiziz (U.S. Patent 6.338.042).

Endo and Walker et al. do not disclose payment provided to the first human is based at least in part on past quality information for the first human.

Paiziz disclose a method for paying humans comprising basing payment provided to a human based at least in part on past quality information for the first human (pay levels for humans are based on performance evaluations, i.e. past quality information, column 5, lines 34-41).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Endo and Walker et al. to base payment on past quality information for a human, because this allows the payment of the human to be adjusted to an appropriate level based on the human's past quality, as taught by Paiziz (column 2, lines 7-19).

Allowable Subject Matter

12. Claims 40 and 74-77 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record specifically suggests sending subtasks to humans to perform the subtasks wherein the subtasks include speech comparison, speech recognition, conversion of speech to text, and comparison of music samples. While Endo discloses dispatching general tasks, none of the additional prior art of record discloses dispatching speech comparison, speech recognition, conversion of speech to

text, and comparison of music samples type tasks, therefore, there is no suggestion of record to modify Endo for speech comparison, speech recognition, conversion of speech to text, and comparison of music samples tasks.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen (U.S. Patent Application Publication 2002/0069235) discloses a distributed system for assigning subtasks to humans. Chaar et al. (U.S. Patent 5,960,404) disclose a system for distributing subtasks to a plurality of humans. Olapurath et al. (U.S. Patent 6,678,714) disclose a task management system.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Albertalli whose telephone number is (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BLA 9/14/06



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